

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

REC'D 08 JUL 2004

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To:

see form PCT/ISA/220

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/EP2004/050205

International filing date (day/month/year)
25.02.2004

Priority date (day/month/year)
18.04.2003

International Patent Classification (IPC) or both national classification and IPC
F23D14/14

Applicant
N.V. BEKAERT S.A.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☒ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/EP2004/050205

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material:
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing:
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

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Box No. II Priority

1. ☒ The following document has not been furnished:

☒ copy of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(a)).

☐ translation of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(b)).

Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.

2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43*bis*.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.

3. Additional observations, if necessary:

Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	2-4,7-9,13-15
	No: Claims	1,5,6,10-12
Inventive step (IS)	Yes: Claims	
	No: Claims	2-4,7-9,13-15
Industrial applicability (IA)	Yes: Claims	1-15
	No: Claims	

2. Citations and explanations

see separate sheet

Reference is made to the following documents:

D1 EP 0 594 262 A
D2 US 2002/0148226 A
D3 WO 01 79756 A

V. Statement according to Rule 43bis.1(a)(i) PCT

- 1) The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1 is not new in the sense of Article 33(2) PCT. Document D1 (Fig.1 and corresponding description) discloses a gas burner with the same features :

- a metal burner membrane (3) comprising a base section (cylindrical portion) having a smallest radius of curvature R_{base} (the radius of curvature of the cylindrical portion is uniform and equals the radius of the cylinder) and a closing section (flat top portion),
- the burner membrane is uninterrupted,
- the burner membrane comprises a transition region (torus shaped portion) for connecting said base section to said closing section, said transition region having a smallest radius of curvature $r_{\text{transition}}$ larger than zero and smaller than R_{base} .

From Fig.1 it clearly appears that the radius of the corners at the top of the cylindrical membrane is smaller than the radius of the cylinder. Otherwise there would be no flat top but a spherical closing section.

Document D2 also discloses the subject-matter of claim 1.

- 2) The subject-matter of claims 11,12 is also known from D1. The subject-matter of claims 5,6,10-12 is also known from D2. Hence the subject-matter of these claims is not new (Article 33(2) PCT). The subject-matter of claims 2-4,8,9 cannot be considered as inventive (Article 33(3) PCT) because the structures of the burner membrane claimed therein are well known to a skilled person (see for example D3) who would use them in the burner of D1 or D2. Similarly the shape of the burner membrane in claims 13-15 are not inventive (Article 33(3) PCT) because

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AUTHORITY (SEPARATE SHEET)**

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they merely represent shapes a skilled person would choose to adapt the shape of the burner to the shape of the object to be heated.

- 3) Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the documents D1,D2,D3 is not mentioned in the description, nor are these documents identified therein.
- 4) The features of the claims are not provided with reference signs placed in parentheses (Rule 6.2(b) PCT).